

Art Unit: 1794

1. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' admissions in their 131 Declaration. The papers filed by applicants admit that both the base paper and the ink receptive coating of their invention were known at the time of their invention. Based upon this admission, it would have been obvious to one of ordinary skill in the art to coat the commercially available base paper with a known ink receptive composition at a conventional coating weight in order to obtain an ink receptive medium. With respect to this rejection, applicants argue that the examiner's conclusion that the claimed coat weight is conventional is "an unsupported contention." It is the examiner's belief that this range would be considered conventional by one of ordinary skill in the art. In addition, however, this contention is not unsupported in the record. Sekiguchi discloses that the ink receiving layer of his medium is 1 to 50 g/m<sup>2</sup>. (See col. 17, lines 18-26). Graumann et al. disclose a preferred range for the ink receiving layer of 4 to 10 g/m<sup>2</sup>. Therefore, that this is a conventional range is supported by the art of record.

2. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (6,485,812) in view of Graumann et al. (EP 0878319) for reasons of record and for reasons given below. The primary reference discloses supports of paper, calendered paper and coated paper (see col. 16, lines 40-65). However, the reference does not recite properties of the paper such as smoothness and porosity. Graumann et al. teach that specific commercially available papers relied upon by applicants (see page 10 of the specification) that will inherently have the properties instantly claimed have been used as supports for ink jet recording materials. Based

upon the disclosure of the primary reference to supports of paper, coated paper and calendered paper, it would have been obvious to one of ordinary skill in the art to use a commercially available paper known as a support in ink jet recording applications. Since the primary reference discloses cross-linking of the coating, that the secondary reference has a coating that is not coated does not overcome the combination rejection. The secondary art is only relied upon to teach that specific commercially available papers were known for use as ink jet recording media substrates. Note that the determination of whether or not a crosslinking agent will be included is not generally be linked to which substrate is selected as in Sekiguchi (see col. 12, lines 39-42 and col. 16, lines 40-65).

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (6,485,812) in view of Graumann et al. (EP 0878319) and further in view of Shih et al. (6,780,924) and Koike et al. (6,777,039). Sekiguchi set forth categories of materials that may be present but does not disclose groups of materials for each category. Therefore, it is appropriate to look at materials that are known in the art for each of these categories. Shih et al. disclose that mordants as recited by claim 4 are known in the art as pigments and mordants respectively in ink receptive layers (see col. 5, lines 34-56). Therefore, it would have been obvious to one of ordinary skill in the art to include poly(diallyldimethylammonium chloride, a well known mordant, as the mordant of the primary reference. Koike et al. disclose an ink jet recording sheet which includes polyvinyl alcohol as binder and boron compounds, including boric acid, to cross-link the binder (see col. 5, lines 9-28 and col. 10, lines 40-52). Based upon this

disclosure of the effectiveness of boron compounds in cross linking polyvinyl alcohol, it would have been obvious to include boric acid as the crosslinker disclosed by the primary reference for its concomitant function therein.

4. Claims 1-3, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi (6,485,812) in view of Graumann et al. (EP 0878319) as relied upon above and further in view of Nigam et al. (6,936,316). Sekiguchi set forth categories of materials that may be present but does not disclose groups of materials for each category. Therefore, it is appropriate to look at materials that are known in the art for each of these categories. Nigam et al. teach inclusion of polyethylene oxide siloxane surfactants in ink receptive layers of ink jet recording media (see Example 3). It would have been obvious to one of ordinary skill in the art to include this surfactant as the surfactant of the primary reference in order to improve coatability as suggested by the primary reference.

5. Applicant's arguments filed December 6, 2007 have been fully considered but they are not persuasive for the reasons set forth above in the statements of rejection.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 1794

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pamela Schwartz whose telephone number is (571) 272-1528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano, can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Pamela R. Schwartz/

Primary Examiner, Art Unit 1794

PRSchwartz  
February 14, 2008